Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1.   (Currently Amended) A method for providing ~~an automatically updated~~ a timestamp for data in a database ~~systems~~ system, the database system operating in accordance with a database schema, the method comprising:

(a) providing ~~at least one~~ a table in the database system, the table including a plurality of rows of data; ~~and~~

(b) providing a hidden timestamp column in the ~~at least one~~ table in the database system, the hidden timestamp column including a timestamp value for each row of data in the table, the timestamp value indicating ~~indicates~~ a last time a corresponding row of data in the ~~at least one~~ table was previously modified, wherein the hidden timestamp column does not appear in the database schema by default and exposes the timestamp value for a given row of data in the table only to a query that calls the timestamp column by name;

receiving a query from an application to obtain a timestamp value from the hidden timestamp column, the query calling the timestamp column by name; and

in response to the query, the hidden timestamp column returning the timestamp value to the application for use by the application.

2-5.   (Cancelled)

6.   (Currently Amended) A method for providing ~~an automatically updated~~ a timestamp for data in a database ~~systems~~ system, the method comprising:

(a) providing ~~at least one~~ a data page in the database system, the ~~at least one~~ data page ~~comprising~~ including a plurality of rows of data; ~~and~~

(b) providing a page timestamp ~~for the at least one~~ in the data page, ~~wherein~~ the page timestamp having a timestamp value that indicates a last time at least one of the plurality of rows in the data page was previously modified, the timestamp value having been converted from a log relative byte address associated with the last time the at least one of the plurality of rows in the data page was previously modified; and

the database system retrieving the timestamp value of the page timestamp from the data page for use by a customer of the database system.

7.   (Currently Amended) The method of claim 6, wherein the ~~page timestamp comprises an update timestamp for the at least one~~ data page is recorded on a disk or in a buffer pool.

8.   (Cancelled)

9.   (Currently Amended) A computer readable medium with program instructions, tangibly stored thereon, for providing ~~an automatically updated~~ a timestamp for data in a database ~~systems~~ system, the database system operating in accordance with a database schema, the program instructions comprising instructions for:

(a) providing ~~at least one~~ a table in the database system, the table including a plurality of rows of data; ~~and~~

(b) providing a hidden timestamp column in the ~~at least one~~ table in the database system, wherein the hidden timestamp column including a timestamp value for each row of data in the

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table, the timestamp value indicating ~~indicates~~ a last time a corresponding row <u>of data</u> in the ~~at least one~~ table was <u>previously</u> modified<u>, wherein the hidden timestamp column does not appear in the database schema by default and exposes the timestamp value for a given row of data in the table only to a query that calls the timestamp column by name;</u>

<u>receiving a query from an application to obtain a timestamp value from the hidden timestamp column, the query calling the timestamp column by name; and</u>

<u>in response to the query, the hidden timestamp column returning the timestamp value to the application for use by the application.</u>

10-13. (Cancelled)

14.   (Currently Amended) A computer readable medium with program instructions<u>, tangibly stored thereon,</u> for providing ~~an automatically updated~~ <u>a</u> timestamp for <u>data in a</u> database ~~systems~~ <u>system, the program instructions</u> comprising instructions for:

(a) providing ~~at least one~~ <u>a</u> data page in the database system, the ~~at least one~~ data page ~~comprising~~ <u>including</u> a plurality of rows of data; and

(b) providing a page timestamp ~~for the at least one~~ <u>in the</u> data page, ~~wherein~~ the page timestamp <u>having a timestamp value that</u> indicates a last time at least one of the plurality of rows <u>in the data page</u> was <u>previously</u> modified<u>, the timestamp value having been converted from a log relative byte address associated with the last time the at least one of the plurality of rows in the data page was previously modified; and</u>

<u>the database system retrieving the timestamp value of the page timestamp from the data page for use by a customer of the database system.</u>

15.   (Currently Amended) The ~~computer~~ readable medium of claim 14, wherein the ~~page timestamp comprises an update timestamp for the at least one~~ data page ~~is~~ recorded on ~~a~~ disk or in a buffer pool.

16.   (Cancelled)

17.   (Currently Amended) A ~~database~~ system ~~operating in accordance with a database schema, the database system~~ comprising:

        ~~at least one~~ ~~a~~ table ~~in a database system~~ ~~including a plurality of rows of data~~; and

        a hidden timestamp column in the ~~at least one~~ table in the database system, wherein the hidden timestamp column ~~including a timestamp value for each row of data in the table, the timestamp value indicating~~ ~~indicates~~ a last time a corresponding row ~~of data~~ in the ~~at least one~~ table was ~~previously~~ modified,

        ~~wherein the hidden timestamp column does not appear in the database schema by default and exposes the timestamp value for a given row of data in the table only to a query from an application that calls the timestamp column by name.~~

18-21. (Cancelled)

22.   (Currently Amended) A ~~database~~ system comprising:

        ~~at least one~~ ~~a~~ data page in a database system, the ~~at least one~~ data page ~~comprising~~ ~~including~~ a plurality of rows of data; and

a page timestamp ~~for the at least one~~ in the data page, ~~wherein~~ the page timestamp having a timestamp value that indicates a last time at least one of the plurality of rows in the data page was previously modified, the timestamp value having been converted from a log relative byte address associated with the last time the at least one of the plurality of rows in the data page was previously modified,

wherein the database system is operable to retrieve the timestamp value of the page timestamp from the data page for use by a customer of the database system..

23.   (Currently Amended) The system of claim 22, wherein the ~~page timestamp comprises an update timestamp for the at least one~~ data page is recorded on a disk or in a buffer pool.

24.   (Cancelled)

25.   (New) The method of claim 1, wherein the application uses the returned timestamp value for controlling a locking scheme associated with recording data updates in the database system.

26.   (New) The method of claim 1, wherein the timestamp value corresponding to a given row of data in the table is automatically updated each time data in the given row has been modified.

27.   (New) The computer readable medium of claim 6, wherein the application uses the returned timestamp value for controlling a locking scheme associated with recording data updates in the database system.

28.   (New) The computer readable medium of claim 6, wherein the timestamp value corresponding to a given row of data in the table is automatically updated each time data in the given row has been modified.

29.   (New) The database system of claim 17, wherein the application uses the timestamp value for controlling a locking scheme associated with recording data updates in the database system.

30.   (New) The database system of claim 17, wherein the timestamp value corresponding to a given row of data in the table is automatically updated each time data in the given row has been modified.